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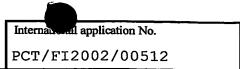
PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION See Form PCT/IPEA/416					
tp101191/juv						
International application No.	International filing date ((day/month/year)	Priority date (day/month/year)			
PCT/FI2002/00512	13-06-2002					
International Patent Classification (IPC) or national classification and IPC						
G02F 1/37, G02B 27/00 // G02B 5/00						
Amiliana						
Applicant						
NOKIA CORPORATION et al						
 This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 						
2. This REPORT consists of a total of 3 sheets, including this cover sheet.						
3. This report is also accompanied by ANNEXES, comprising:						
a (sent to the applicant and to the International Bureau) a total of sheets, as follows:						
sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).						
		ut which this Authori	ity considers contain an amendment that goes			
beyond the di	isclosure in the internation:	al application as filed	l, as indicated in item 4 of Box No. I and the			
Supplemental	Box.					
b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))						
	, containin	g a sequence listing	and/or tables related thereto, in computer			
readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).						
4. This report contains indications relating to the following items:						
·						
Box No. II Priority	,					
! <u> </u>		h record to novelty i	nyantiya atan and industrial applicability			
l <u></u>						
	Box No. IV Lack of unity of invention					
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
	Certain documents cited					
Box No. VII Certain defects in the international application						
	——————————————————————————————————————					
Date of submission of the demand		Date of completion of this report				
12-01-2004		21-09-2004				
Name and mailing address of the IPEA/SE		Authorized officer				
Patent- och registreringsverket						
Box 5055 S-102 42 STOCKHOLM		E. Westin	/i+w			
Facsimile No. +46 8 667 72 88		E. Westin /itw Telephone No. +46 8 782 25 00				
Form PCT/IPEA/409 (cover sheet) (January 2004)						





Box	No. I	Basis of the report	
1.	With a	regard to the language, this report is based on the international application in the language wise indicated under this item.	age in which it was filed, unless
	Ш	This report is based on a translation from the original language into the following language which is the language of a translation furnished for the purposes of:	ge,
		international search (under Rules 12.3 and 23.1(b))	
		publication of the international application (under Rule 12.4)	
		international preliminary examination (under Rules 55.2 and/or 55.3)	
2.	furnish	regard to the elements of the international application, this report is based on (replanted to the receiving Office in response to an invitation under Article 14 are referred to it re not annexed to this report):	acement sheets which have been n this report as "originally filed"
	\boxtimes	the international application as originally filed/furnished	
		the description:	
		pages	
		pages* received by this Authority on	
		pages* received by this Authority on	
	لــا	the claims:	
		pages	_ as originally filed/furnished
			any statement) under Article 19
		pages* received by this Authority on pages* received by this Authority on	
		the drawings:	
		-	oo originally flad/franished
		pages* received by this Authority on	_ as originally filed/furnished
		pages* received by this Authority on	
		a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequen	ace Listing.
3.		The amendments have resulted in the cancellation of:	-
		the description, pages	
		the drawings sheets/figs	
		the company listing (iC)	
		any table(s) related to the sequence listing (specify):	
		any taolo(s) related to the sequence fishing (specify):	
4.		This report has been established as if (some of) the amendments annexed to this report made, since they have been considered to go beyond the disclosure as filed, as indicated 70.2(c)).	ort and listed below had not been ed in the Supplemental Box (Rule
		the description, pages	
		the claims, Nos.	
		the drawings, sheets/figs	
		the sequence listing (specify): any table(s) related to the sequence listing (specify):	
*	If item	n 4 applies, some or all of those sheets may be marked "superseded."	





Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N) $\begin{array}{c|cccc} Claims & 1-12 & YES \\ Claims & & & NO \\ \hline \\ Inventive step (IS) & Claims & 1-12 & YES \\ Claims & & NO \\ \hline \\ Industrial applicability (IA) & Claims & 1-12 & YES \\ Claims & & NO \\ \hline \end{array}$

2. Citations and explanations (Rule 70.7)

Documents cited in the International Search Report:

D1: US4693561 A D2: EP0434139 A

Document D1 discloses an amorphous silicon spatial light modulator with a three electrode structure. An object of the D1 invention is to control the shape of the electric field in a thin amorphous silicon layer and a liquid crystal filling space.

Document D2 discloses a tunable optical waveguide device comprising a deformable gel layer. The object of the D2 invention is to achieve active phase matching for frequency doubling.

The cited documents represent the general state of the art. The invention defined in claims 1-12 is not disclosed by any of these documents.

The cited prior art does not give any indication that would lead a person skilled in the art to the claimed electrically controlled light modulator device with an electric field enhancement electrode structure. Therefore, the claimed invention is not obvious to a person skilled in the art.

Accordingly, the invention defined in claims 1-12 is novel and is considered to involve an inventive step. The invention is industrially applicable.